

administering to a host said modified mesenchymal stem cells, thereby inhibiting a T-cell response to said antigen upon subsequent exposure of the T-cells to antigen presenting cells which express co-stimulatory molecules.

22. The method of Claim 21 wherein said mesenchymal stem cells do not produce co-stimulatory molecules.
23. The method of Claim 21 wherein said mesenchymal stem cells are genetically engineered to express a molecule to block co-stimulation of T-cells.
24. The method of Claim 23 wherein the molecule is membrane-bound.
25. The method of Claim 24 wherein the molecule is CTLA-4.
26. The method of Claim 23 wherein the molecule is a soluble protein.
27. The method of Claim 26 wherein the molecule is CTLA-4-Ig fusion protein.
28. A method of inhibiting a T-cell response to an antigen, comprising:

modifying human mesenchymal stem cells to present said antigen by genetically engineering said human mesenchymal stem cells to express said antigen, wherein said human mesenchymal stem cells do not produce co-stimulatory molecules in a sufficient amount to activate T-cells, whereby said human mesenchymal stem cells process said antigen into an antigen fragment for presentation by said human mesenchymal stem cells; and

administering to a host said modified human mesenchymal stem cells, thereby inhibiting a T-cell response to said antigen upon subsequent exposure of the T-cells to antigen presenting cells which express co-stimulatory molecules.

29. The method of Claim 28 wherein the antigen is an autoantigen.